

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/714,627	11/17/2000	Masakazu Hattori	04329.2460	8897
22852	7590 01/14/2005		EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			LE, MIRANDA	
			ART UNIT	PAPER NUMBER
			2167	
			DATE MAILED: 01/14/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Comments	09/714,627	HATTORI ET AL.			
Office Action Summary	Examiner	Art Unit			
	Miranda Le	2167			
The MAILING DATE of this communication apperiod for R ply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 19 J	uly 2004.				
2a)⊠ This action is FINAL . 2b)☐ This					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) ⊠ Claim(s) 1-7,10,11,15 and 16 is/are pending in 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-7,10,11,15 and 16 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Examine	er.				
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.					
Applicant may not request that any objection to the	_				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea 	ts have been received. ts have been received in Applicati ority documents have been receive	on No			
* See the attached detailed Office action for a list	` ''	ed.			
	•				
	•				
Attachment(s) 1) Milyling of References Cited (RTO 802)	A) □ (-t	(DTO 442)			
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)			

Application/Control Number: 09/714,627

Art Unit: 2167

DETAILED ACTION

Page 2

- 1. This communication is responsive to Amendment filed 07/19/2004.
- 2. Claims 1-7, 10-11, 15-16 are pending in this application. Claims 1, 15, 16 are independent claims. In the Amendment, claims 1-3, 6, 10 have been amended, claims 8-9, 12-14 have been cancelled, claims 15-16 have been added. This action is made Final.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

- (e) the invention was described in
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1-2, 4-7, 10-11, 15, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Tateishi et al. (US Patent No. 5,669,007).

Tateishi anticipated independent claims 1, 15, 16, by the following:

As to claims 1, 15, 16, Tateishi teaches "A structured document search method for searching a structured document database, comprising: accepting a search request in the form of a logical structured document" at col. 6, lines 27-59, col. 17, line 64 to col. 18, line 50, Fig. 4,

Application/Control Number: 09/714,627

Art Unit: 2167

line 50; and

Page 3

"analyzing the accepted search request to generate a search graph including graph nodes based on the logical structure, wherein a variable to be embodied is inserted between the graph nodes" at col. 6, lines 27-59, col. 17, line 64 to col. 18, line 50, col. 12, line 43 to col. 13, line 5, Fig. 4;

"generating a search plan for a hierarchical structure possessed by a searched document, in which a search processing procedure for said structured document database is developed from said search graph" at col. 6, line 60 to col. 7, line 41, col. 17, line 64 to col. 18, line 50, Fig. 4, said generating the search plan including:

- "(a) applying a plan generation rule to any one of said graph nodes, using a plan generation rule base including a plurality of plan generation rules, the plurality of plan generation rules each including rule application conditions, costs and search processing procedures" at col. 6, line 60 to col. 7, line 41, col. 14, lines 16-61, Fig. 4, "(b) executing a search processing procedure of the applied plan generation rule for materializing said variable" at col. 6, line 60 to col. 7, line 41, col. 17, line 64 to col. 18,
- "(c) repeating the applying and the executing thereby to complete said search plan, and acquiring search results satisfying said search request by executing said search plan" at col. 17, line 64 to col. 18, line 49, Fig. 4.

As per claim 2, Tateishi teaches "utilizing index information relating to actual data in said structured document database for said materializing" at col. 10, lines 13-33.

Art Unit: 2167

As per claim 4, Tateishi teaches "the search plan is executed after the completion of the generation of said search plan" at col. 17, line 64 to col. 18, line 50.

As per claim 5, Tateishi teaches "generation and execution of said search plan are performed alternately" at col. 17, line 64 to col. 18, line 50.

As per claim 6, Tateishi teaches "said structured document database includes a hierarchical structure concerning element name and element value" at col. 15, lines 9-53, col. 17, line 64 to col. 18, line 50, Fig. 10;

"said search request includes search conditions concerning said element name and said element value" at col. 15, lines 9-53, Fig. 10;

"said index information includes at least one of data creation index including information for specifying said element value creation position in said structured document database and element name occurrence index including information for specifying said element name creation position in said structured document database" at col. 10, lines 13-33.

As per claim 7, Tateishi teaches "said element name occurrence index includes information indicating said element name creation position by a parent element one rank higher in hierarchy of the partial structure where said element name is generated" at col. 10, lines 13-33.

As per claim 10, Tateishi teaches "said plan generation rule can be arbitrarily registered or deleted in said plan generation rule base" at col. 10, lines 13-33, col. 14, lines 16-61.

As per claim 11, Tateishi teaches "wherein said search graph is generated based on the syntax analysis results of the description of said search request, in the generation of said search graph" at col. 13, line 6 to col. 14, line 11, col. 11, line 26 to col. 12, line 42.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tateishi et al. (US Patent No. 5,669,007), in view of Bello et al. (US Patent No. 6,496,819 B1).

As per claim 3, Tateishi does not explicitly teach "selecing, from applicable plan generation rules, a plan generation rule a cost of which is less than said applicable plan generation rules". However, Bello teaches this limitation at col. 11, lines 1-27.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references because Bello's teachings would have allowed Tateishi's to efficiently rewrite queries to access data sources that are not specifically referenced in the queries and thereby can access the current best materialized view.

Art Unit: 2167

Response to Arguments

7. Applicant's arguments regarding Cheng does not suggest the amended claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (571) 272-4107. The fax number to this Art Unit is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Miranda Le

January 07, 2004